AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing Of Claims:

1. (Currently Amended) A method for calibrating a sensor system for detecting and analyzing an object in a path of a vehicle, comprising the steps of:

detecting characteristic data of the object by operating the sensor system;

sending to a calibration unit data that is interpreted as representing the object as one of stationary and quasi-stationary, taking into account a motion of the vehicle;

determining a deviation in instantaneously measured data from data of a model of the object as an error vector; [and]

correcting, in accordance with the deviation, the data of the model in order to minimize the deviation;

after an initialization phase occurring in accordance with preselectable parameters, performing a first determination of object data stored as model data;

in all subsequent measurements performed cyclically, processing instantaneous data of the object data in the calibration unit with the previously determined and stored model data in order to obtain the respective error vector;

during the processing step, selecting the object data, any object data not found again being deleted and newly added object data being included; and

characterizing the object data including a reduction in a respective confidence interval after repeated measurements from different positions of the vehicle as data belonging to one of the stationary object and the quasi-stationary object.

2. (Canceled)

3. (Canceled)

4. (Currently Amended) The method according to claim [3] 1, further comprising the steps of:

determining a congruent relative velocity of the object from successive ones of the object data;

determining the motion of the vehicle on the basis of the congruent relative velocity; and

characterizing the object data attributable to the object including the congruent relative velocity as data belonging to one of the stationary object and the quasi-stationary object.

5. (Original) The method according to claim 1, wherein:

a rotational motion of the vehicle due to at least one of a pitching motion and a turning a corner corresponds to the motion of the vehicle.

6. (Original) The method according to claim 1, further comprising the step of:

causing a sensor arranged in an image recording system of the sensor system to serially determine and analyze pixels in accordance with an electronic camera having a nonlinear transformer characteristic in a recording interval.

7. (Original) The method according claim 1, further comprising the step of:

transferring a result of a calibration of a sensor of the sensor system to at least one other sensor in the vehicle in order to calibrate the at least one other sensor.

8. (Original) The method according to claim 1, further comprising the step of:

sending a signal to one of an analyzer unit and a driver of the vehicle when at least one sensor of the sensor system yields contradictory measurement data.

9. (New) A method for calibrating a sensor system for detecting and analyzing an object in a path of a vehicle, comprising the steps of:

detecting characteristic data of the object by operating the sensor system;

sending to a calibration unit data that is interpreted as representing the object as one of stationary and quasi-stationary, taking into account a motion of the vehicle;

determining a deviation in instantaneously measured data from data of a model of the object as an error vector;

correcting, in accordance with the deviation, the data of the model in order to minimize the deviation; and

performing a calibration of the sensor system.

10. (New) A method for calibrating a sensor system for detecting and analyzing an object in a path of a vehicle, comprising the steps of:

detecting characteristic data of the object by operating the sensor system;

sending to a calibration unit data that is interpreted as representing the object as one of stationary and quasi-stationary, taking into account a motion of the vehicle;

determining a deviation in instantaneously measured data from data of a model of the object as an error vector; and

correcting, in accordance with the deviation, the data of the model in order to minimize the deviation and to converge calibration parameters of the sensor system.